Please cancel claims 53-88, without prejudice to or disclaimer of the subject matter contained therein. Applicants reserve the right to prosecute these claims in one or more continuation and/or divisional applications of the present application.

Please add the following new claims:

- -- 89. The method of claim 26, wherein said first or second recombination sites are Int recognition sites or portions thereof.
- 90. The method of claim 89, wherein said Int recognition sites are selected from the group consisting of an *att*B site, an *att*D site, an *att*L site, an *att*R site, and mutants, variants, portions and derivatives thereof.
- 91. The method of claim 26, wherein said first or second recombination sites are recombination sites recognized by a resolvase.
- 92. The method of claim 91, wherein said resolvase is selected from the group consisting of $\gamma\delta$, Tn3 resolvase, Hin, Gin and Cin.
- 93. The method of claim 26, wherein said first or second recombination sites are transposons or transposable genetic elements.

HARTLEY *et al.* Appl. No.: 09/177,387

- 94. The method of claim 93, wherein said transposons or transposable genetic elements are selected from the group consisting of Tn916, IS231 and Tn7.
- 95. The method of claim 26, wherein said first or second recombination sites are integrons.
 - 96. The method of claim 6, wherein said integrons are In2 integrons.
- 97. The method of claim 26, wherein said first or second recombination sites are recombination sites recognized by an introd-encoded homing endonuclease.
- 98. The method of claim 26, wherein said first and second recombination sites do not recombine with each other.
- 99. The method of claim 30, wherein said polyA RNA molecule is an mRNA molecule. --

Please amend the remaining claims as follows:

26. (Three times amended) A method for synthesizing a double stranded nucleic acid molecule comprising

Appl. No.: 09/177,387

(a) mixing one or more nucleic acid templates with a polypeptide having polymerase activity and one or more primers comprising [one or more recombination sites or portions] at least a first recombination site or portions thereof;

- (b) incubating said mixture under conditions sufficient to synthesize a first nucleic acid molecule which is complementary to all or a portion of said templates and which comprises [one or more recombination sites or portions] said first recombination site or portions thereof; and
- (c) incubating said first nucleic acid molecule in the presence of one or more primers comprising [one or more recombination sites or portions] at least a second recombination site or portions thereof under conditions sufficient to synthesize a second nucleic acid molecule complementary to all or a portion to said first nucleic acid molecule, thereby producing a double stranded nucleic acid molecule comprising [two or more recombination sites or portions thereof.] at least said first and second recombination sites or portions thereof, wherein said first and second recombination sites are not lox sites.
- 30. (Once amended) The method of claim 29, wherein said RNA is [an mRNA or] a polyA RNA molecule.
- 52. (Once amended) The method of claim 26, wherein said recombination sites or portions thereof are located at or near one <u>or</u> both termini of said double stranded nucleic acid molecule.